Date: Sun, 21 Mar 93 04:30:15 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #356
To: Info-Hams

Info-Hams Digest Sun, 21 Mar 93 Volume 93 : Issue 356

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

Date: 21 Mar 93 11:43:27 GMT
From: pipex!bnr.co.uk!uknet!edcastle!spider!raft.spider.co.uk!jmorris@uunet.uu.net
Subject: CW timing and rare char.
To: info-hams@ucsd.edu

In article <1993Mar19.090111.21568@news.columbia.edu> hyx1@cunixb.cc.columbia.edu
(Harry Y Xu) writes:

>Second Q: Is there a formula for calculating the word/character
>   speed with the duration for a dit.
>   (Assume the duration for dit is T, dah is 3T, element space
>   is T, character space is 3T, and word space is 7T.)
>

(apologies if this post is one of many with the same info: The net time
warp is such that the original arrived here just a few minutes ago - around
noon, on 21 March, two days after it was posted :-( )

There may be a difference under different regimes, but in IARU region 1
the official "word" is "Paris " (including that 7 dot space after the

last letter). (No prizes whatsoever for guessing which country proposed this standard...) Tot up the dots, dashes and gaps and it comes to exactly 50 dot-length periods. So the definition of a CW word is 50 dot lengths. Play around with that and you can get the formula:

    speed (wpm) = 1.2 / dot_length (seconds)

So a 12wpm dot is 0.1 seconds, a 24 wpm dot is 50mS, and so on.

Of course, throw Farnsworth spacing into this and it all gets more complicated. I have worked out the numbers for that (to write a CW tutor program) but my notes are at home. If anyone really wants to know, mail me.

It can be fun to play with the numbers. At 60wpm a dot is 20mS. So a string of dots at that speed is a 25Hz square wave. I don't hear that as dots but as a very low audio tone - so I suspect that that speed will forever be beyond me!

73, John, GM4ANB

--
John Morris != Spider Systems   jmorris@spider.co.uk   GM4ANB@GB7EDN.#77.GBR.EU

Date: 21 Mar 93 09:08:36 GMT
From: olivea!mintaka.lcs.mit.edu!ogicse!flop.ENGR.ORST.EDU!leela.CS.ORST.EDU!
atlantis.CS.ORST.EDU!forbesm@uunet.uu.net
Subject: Nicad Memory Effect-Fact or Myth?
To: info-hams@ucsd.edu

tad@ssc.com (Tad Cook) writes:

>Do the performance of NiCad batteries suffer when they are repeatedly
>only slightly discharged? The story goes that one should do a deep
>discharge every time, before doing a complete charge. Otherwise
>after a number of shallow charge-discharge cycles the battery cannot
>do a deep discharge anymore.

>I can't seem to find any research that supports either conclusion.
>The nicad memory belief seems to be quite popular, but none of
>the proponents that I have talked to can ever point me to any
>substantial source for data.

The Gates Battery Engineering Handbook has a whole section on this.
The proper mechanism is really 'voltage depression'. Let me see if I
can explain this in a way that makes sense.

If you short-cycle a Nicad several times, it begins to show a voltage depression effect. The portion of the plates which has not been discharged loses some terminal voltage due to the formation of 'stuff' on the plates. (I don't have the book in front of me; it's at work. I'm doing this from memory. (pun intended)) This 'stuff' is removed by a deep discharge of the cell followed by a full recharge. It *is* reversible, but the characteristics of a Nicad make it unlikely to be reversed, for the reasons shown below.

If a cell is discharged, it follows a *very* flat discharge curve at 1.2 volts until exhaustion. Then it drops off like the proverbial cliff. Most battery life detection looks for a very slight drop in output voltage and screams bloody murder. After all, there's not much time left when a Nicad begins to die. Now imagine what happens when you've discharged all the recently-charged plate material in the battery. The terminal voltage of the voltage-depressed portion of the plates is about .1 to .2 volts lower than the un-depressed portion. So, the 'good' parts discharge first until they reach about 1.1 to 1.0 volts, at which point *they* are completely exhausted. The voltage-depressed areas are just coming on-line, however, at 1.0 to 1.1 volts. They'd maintain this voltage out to the end of their capacity, many amp-hours later.

At least they would, if it weren't for the battery-life-detect circuit hollering about how it's time to recharge the battery! So Joe User obediently plugs in the charger, recharging the discharged parts and mostly ignoring the voltage-depressed parts. And the cycle repeats.

After a while Joe User begins complaining about how these Nicad batteries have 'memory' and just aren't any good.

That's the story, as I have it from the guys who invent these things for a living. For more information, check with Gates. Your local college library probably has this book too, but I got mine from one of the engineering book clubs. I think it might be a Prentice Hall book. If there's interest, mail me and I'll dig up the ISBN and publisher data.

Charge On!

Mark G. Forbes | forbesm@atlantis.cs.orst.edu
Corvallis, OR | 503 754 3104 home phone | Hardware R & D
"Never ascribe to malice that which can be blamed on the engineer."

Date: 21 Mar 1993 04:05 CST
From: sdd.hp.com!cs.utexas.edu!tamsun.tamu.edu!zeus.tamu.edu!
jpd4680@network.UCSD.EDU
Subject: Real NoCodes

To: info-hams@ucsd.edu

In article <1993Mar20.024756.22555@anomaly.sbs.com>, ka1ftw@anomaly.sbs.com writes...
>
>   No-Codes
>1. Call "CQ" Endlessly on the Repeater. (trying for "W.A.S." and "D.X.C.C." no duobt !!)
>
All the No-codes I know (including myself) have other lives, and subsequently do not "call endlessly" on the repeater, especially if they had only the chance to talk to some blowhard like you.

>2. Call "N1XXX Listening" Until Someone Talks To Them. (must be real lonely)
Heaven forbid someone gets bored and just wants to ragchew. But I've still NEVER heard someone continuously announce his presence on a repeater.

>3. Give Signal Reports of 5 and 9 On The Output of The Repeater. (what's an input ?)
Maybe it's because our repeater organization tries to HELP OUT the newcomers with jargon, et al, I've never heard it used.

>4. Calls a Frequency a Channel. (must miss CB !!!)
Never used it, never heard it. Although forgive me if I didn't notice someone use the term. I prefer a pleasant conversation, and couldn't particularly care less if someone slips in his usage.

>5. Says "Break" to Make a Call. (break means you have emergency traffic in ham radio !!!!!)
I could have sworn "Break BREAK" was the term for EMERGENCY traffic.

>6. Make a Call on a Reapeter in use without listening first. (frequency, uh, channel hopping)
More generals, advanced, and extras have done this to me than nocodes, and then only VERY rarely. Maybe we're just more courteous in Texas.

>7. Use a Repeater to talk to someone 50 feet away. (at 50 watts no less !!!)
Repeaters make a nice "place" to meet others for a scheduled ragchew, and if there's no one else around, I see little reason to move. But your comment ignores a myriad of factors, like whether the person NOT using 50 Watts is on a 1-Watt HT and can't reach your 50-Watt criminal.

>8. Use HTs with Rubber Ducks in Cars and wonder why they can't hit the Repeater !!!
>   (should "REFLECT" on this one a bit)
Keep this your little secret, would you? We'd hate to have anyone learn on the airwaves.

>9. Think Home-Brew is a Drink like Moonshine. (beam me up scotty, there no sentient life here !!!)
As a senior electrical engineer, I'm pretty sure I know more about electronics and other "home-brew" than you do. And I'm a "mere" no-code tech. And don't bother sharing your (assumed) positive experiences making your own equipment with newcomers--I'm sure they don't want to hear about one of the more interesting sides of Ham radio. Keep 'em in the dark.

>10. Overuse "Q" Signals on Phone. (QSL ? QRT and listening !!!!)
In my experience, DXers are the prime culprit of this horrible atrocity. I never use them, and I'm a "mere" no-code.

>11.Say BREAK,CQ,QSK,QRZ, or Call to make a call.(I thought that's what call
>letters were for ??)
We new hams are inundated with various styles of operating for the various bands and modes, and some hams (no-code and up) sometimes lapse or get confused about what to say where. I used to toss in unnecessary words myself. But don't try to explain to these NEW hams that such usage is not necessary. Don't share simple operating habits. Just keep complaining.

>12. Say "WE ARE CLEAR" ect... as if their radio was Sentient. (Data. on Star Trek Next Gen. ??)
Data. on Star Trek, appears to have a better sense of humor than you do. Have you considered living your life vicariously through someone far more interesting than yourself?

>13. Jam a Repeater until it's clear for them to use. (A.R.E.S and R.A.C.E.S nets are targets !!!)
Repeater (and other frequency) jamming is far from limited to no-codes. All the no-codes, and all the hams I know for that matter, wait or ask to use the repeater.

>14. Take offence when someone trys to help them with their operating habits.(good attidute huh ??)
Considering the manner in which you speak of us no-codes and considering the fact that I am presently taking offense of your accusations, this is completely understandable. You might try being nice.

>15. Say things like "getting some locomotion then we'll flip-flop for an eyball, got the moco-java ?"
> (is this ham radio or 11 meters ????)
So they've seen the light and moved to real radio. I'm delighted to hear of a new ham who came from CB. If you're in a conversation where such colloquialisms take place, simply ask them to refrain, and get on with the conversation. No need to take offense. Oh, wait, I'm sorry, you're a ham with the ability to use an outmoded means of communication, and you should subsequently be worshipped. Forgive me, oh all-knowing, perfect one.

>Anyone else have any horror stoties out there ????
Yes. Higher-class licensees who complain about no-codes, higher-class licensees who sit around and tell me about how I could build a better antenna (and every other subject on earth), and higher-class licensees who know nothing about tact. Also, higher-class licensees who just learned the questions and answers to the tests without learning anything about the subjects covered.

>I and other Ham's have been working with O.O's in two States and found that 98% of Jamming ect...
>to be No-Codes.
Kindly provide us with the numbers to back up this inflated claim.

>One even got caught on their Local Police Frequency.
The higher classes are, of course, immune from this sort of bahavior.

>And just got caught again jamming two repeaters.(good ham huh ????)
I don't jam repeaters. No ham I know jams repeaters. The last time I heard a jamming story, in fact, was when a poorly designed POLICE radio jammed an AMATEUR repeater. This came from a friend of mine who is not only a police officer, but an amateur radio operator (advanced class). They tracked down the problem, fixed it, and got on with their lives.

>THIS DOES NOT PROMOTE GOOD PUBLIC RELATIONS DOES IT ?????
You, however, do a wonderful job of promoting the notion that hams are lifeless blowhards who like to belittle others whose sole crime is not to have learned an outdated means of communication. My friends and I manage to portray amateur radio as an interesting way to talk to other people. My friends and I try to ENJOY the hobby.

>---- OUR REPEATER MOTTO
>
>---- 11 METERS FOR NO-CODES
>
>---- REAL HAMS BOUND BRASS !!!!!!!!!!!!!!!!!!!!!!!!!!
>
We, of course, don't have a repeater motto, and we don't choose to exclude others from our repeater.

However, what do you think of THIS motto:

If brass-pounding is so great, what are you doing with a repeater? Which operates with FM voice?

>SIGNED
>   KEVIN
>   KA1FTW

HF for brass-pounders. Leave VHF to no-codes and any other hams who realize

Morris is not the end-all, be-all to amateur radio.

Jon DeShazo
Texas A&M University
N5WBT

End of Info-Hams Digest V93 #356
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